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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/511,728

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Jeppe Bastholm

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10/14/2009

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EXAMINER

GLASS, ERICK DAVID

ART UNIT

PAPER NUMBER

2837

MAIL DATE

DELIVERY MODE

10/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,728	BASTHOLM, JEPPE	
	Examiner	Art Unit	
	Erick Glass	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 3, 4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bastholm et al (6,509,705) in view Weimer et al (5,982,156).

With respect to claim 1, 5, and 6, Bastholm et al. discloses a drive unit for an actuator that drives a movable member (including an article of furniture) (col. 1, lines 3-9) comprising a dc motor having a rotor consisting of a plurality of coils connected to a commutator in connection with a set of brushes (col. 1, lines 3-5; inherent that a dc motor has a rotor with coils and a commutator that contacts brushes); a transmission that uses the motor to drive an adjustment means that adjusts an adjustable element (col. 4, lines 62-65); a power supply that supplies power to the drive unit, where the power supply comprises a transformer having a primary side connected to an ac source (col. 1, lines 6-7), and a secondary side having a rectification and smoothing means for connection to the dc motor (col. 1, lines 7-9); the drive unit comprises a first control means (column 5, lines 12-30) to compensate for loss in the motor, thereby maintaining the motor at a constant speed (cols. 3/4, lines 58-67/1-13; current feedback reduces power loss and keeps motor speed constant; and the drive unit also comprises a second control (column 6, lines 50-63) that removes voltage ripple, also keeping the

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motor at a constant speed (col. 3, lines 35-45; tapping current reduces voltage ripple; reduced power loss means the motor can stay at a constant speed), and including an astable timer having a duty cycle which is controlled by output voltage and adjusted by input voltage.

Basthom et al. does not disclose the second period of time being shorter in duration than said first period of time, and including an astable timer having a duty cycle which is controlled by output voltage and adjusted by input voltage.

Weimer et al discloses a control circuit that provides the same control wherein the second period of time being shorter in duration than said first period of time. With respect to figure 2, the first period relating to the inductor and transistor (L and 214) varies according to the voltage, while the second stage relates to the capacitor being shorter in length, and including an astable timer having a duty cycle (columns 11/12, lines 20-67/1-49);which is controlled by output voltage and adjusted by input voltage. It is commonly know in the art that the first period relating to the inductor and transistor of a boost circuit has a longer period than the second period relating to the capacitor.

With respect to claim 2, Bastholm et al. does not disclose the forward and power steps as claimed.

Weimer discloses a converter that uses forward step where the duty cycle is expressed in terms of a constant and the input voltage (cols. 11/12, lines 20-67/1-49; V_{ref} is the constant and V_1 is the input voltage; therefore, arranging equation 4 around gets the relationship; a power step where the output voltage is expressed by the input voltage and the duty cycle (equation 5); and the forward step and the power step result

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in the output voltage being equal to the constant (equations 6 and 1 allow the output voltage to equal the constant V_{reg} . The motivation to implement the forward and power steps is to reduce the effects of transients (cols. 3/4, lines 66-67/1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to implement the converter of Weimer et al. into the Bastholm et al. circuit, thereby providing the advantage of reducing transients, as taught by Weimer et al.

Allowable Subject Matter

Claims 3, 4, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 9/03/09 have been fully considered but they are not persuasive.

In response to applicant's argument that "Weimer deals with a very different problem from anything that would occur in Bastholm", the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). When dealing with electrically adjusted structure, it would seem obvious when someone having ordinary skill in the art were to reduce acoustic noise that they would

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like towards modifications in the electrical system. Weimer teaches a similar control system which is the relation of the modification, and dissection of the circuit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is (571)272-8395. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/
Primary Examiner, Art Unit 2837

/Erick Glass/
Examiner, Art Unit 2837